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Docket No.: 0036119.00227US1/AM100905  
(PATENT)



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Takao Abe Confirmation No.: 1495  
Application No.: 10/693,315 Art Unit: 1624  
Filed: October 24, 2003 Examiner: M. L. Berch  
Title: PROCESS FOR PREPARING 6-ALKYLIDENE PENEM  
DERIVATIVES

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Dear Sir:

Applicants bring to the attention of the Examiner the documents listed on the attached Form PTO/SB/08. This Information Disclosure Statement is being filed with a Request for Continued Examination; therefore, no fee is due.

Citation BB on the enclosed Form PTO/SB/08 is a European patent application in French. For the Examiner's convenience, Applicants also include a copy of the corresponding issued European patent, EP-0313 458 B1 (cite no. BB), which includes the issued claims in English. In addition, Applicants include a print out of the summary of this reference from the Delphion website (cite no. CC), which includes an English language abstract.

In addition, Applicants wish to make the Examiner aware of the following co-pending applications and their associated prosecution histories:

11/508,037, filed August 22, 2006 entitled "Process For Preparing  $\beta$ -Lactamase Inhibitors"

11/493,178, filed July 26, 2006, entitled "Bicyclic 6-Alkylidene-Penem Beta-Lactamase Inhibitors And Beta-Lactam Antibiotic Combination: A Broad Spectrum Antibiotic"

11/493,331, filed July 26, 2006, entitled "Tricyclic 6-Alkylidene-Penem Beta-Lactamase Inhibitors And Beta-Lactam Antibiotic Combination: A Broad Spectrum Antibiotic"

11/283,288, filed November 18, 2005, entitled "Tricyclic 6-Alkylidene-Penems As Beta-Lactamase Inhibitors"

11/447,814, filed June 6, 2006, entitled "Bicyclic 6-Alkylidene-Penems As Beta-Lactamase Inhibitors"

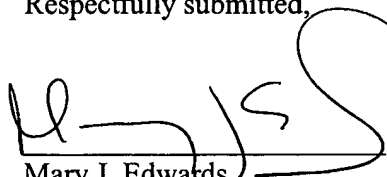
10/427,666, filed May 1, 2003, to which the instant Application claims priority, entitled "Process For Preparing 6-Alkylidene Penem Derivatives"

Please charge the \$180.00 fee to our Deposit Account No. 08-0219.

Applicants request that the Examiner initial and return a copy of the enclosed Form PTO SB-08 with the next communication.

Respectfully submitted,

Dated: March 29, 2007

  
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PTO/SB/08A/B (09-06)

Approved for use through 03/31/2007. OMB 0651-0031

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet	1	of	1	Attorney Docket Number	0036119.00227US1/AM100905
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**Complete if Known**

Application Number	10/693,315-Conf. #1495
Filing Date	October 24, 2003
First Named Inventor	Takao Abe
Art Unit	1624
Examiner Name	M. L. Berch
Attorney Docket Number	0036119.00227US1/AM100905

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-20040053913	03-01-2004	Abe et al.	
	AB*	US-20040077622-A1	09-26-2006	Venkatesan et al.	
	AC*	US-20040132708	07-01-2004	Abe et al.	
	AD*	US-5,911,985	06-15-1999	Coleman et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA	WO-91/12815	09-05-1991	Squibb Bristol Myers Co		
	BB	EP-0 313 458 A2	04-26-1989	Roussel Uclaf		
	BC	EP-0-313 458 B1	08-11-1993	Roussel Uclaf		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	WEISS, et al., "In Vitro and In Vivo Activities of Novel 6-Methylidene Penems as Bets-Lactamase Inhibitors", Antimicrobial Agents and Chemotherapy, 48(12):4589-4596 (2004)	
	CB	Invitation to Pay Additional Fees and Partial Search Report dated March 9, 2007 for PCT/US2006/032781	
	CC	Delphion Integrated View of EP0313458B1 dated March 29, 2007	

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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PTO/SB/08A/B (09-06)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet	1	of	2	Attorney Docket Number	0036149-00200US3
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**Complete if Known**

Application Number	<del>11/283,288 Conf. #4075</del>
Filing Date	<del>November 18, 2005</del>
First Named Inventor	<del>Arenapakam M. Venkatesan</del>
Art Unit	<del>N/A</del>
Examiner Name	<del>Not Yet Assigned</del>
Attorney Docket Number	0036149-00200US3

10/693315  
10/24/2003  
Takao Abe  
1624  
Berch  
36119.227US1  
AM/100905P1

**U.S. PATENT DOCUMENTS**

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		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-20030080312-A1	08-10-2004	Seddon et al.	
	AB*	US-20040043978	03-01-2004	Venkatesan et al.	
	AC*	US-20050101654-A1	09-26-2006	Weiberth et al.	
	AD*	US-4,206,067	06-03-1980	MacKinnon	
	AE*	US-4,891,369	01-02-1990	Torii et al.	
	AF*	US-6,268,393	07-31-2001	Xu et al.	
	AG*	US-7,018,997-A1	03-28-2006	Venkatesan et al.	
	AH*	US-7,112,582-A1	09-26-2006	Venkatesan et al.	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA	EP-0167050	01-08-1986	Beecham Group Plc		
	BB	WO-03/093277	11-13-2003	Wyeth Corp et al.		
	BC	WO-03/093279	11-13-2003	Wyeth Corp et al.		
	BD	WO-03/093280	11-13-2003	Wyeth Corp et al.		

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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	BUSH, "β-Lactamases of Increasing Clinical Importance", Cur. Pharm. Design, 5:839-845 (1999)	
	CB	BUSH, et al., "Kinetic Interactions of Tazobactam with β-Lactamases from All Major Structural Classes", Antimicrobial Agents and Chemotherapy, 37(4):851-858(1993)	
	CC	CIGNARELLA, et al., "6-Chloro- and 6-Bromopenicillanic Acids", J. Org. Chem., 27:2668-2669 (1962)	
	CD	COLEMAN, "Anti-Infectives: An Update on β-Lactamases and β-Lactamase Inhibitors", Expert Opin. Invest. Drugs, 4(8):693-704 (1995)	
	CE	Grant and Hackh's Chemical Dictionary, Fifth Edition, page 412 (1987)	
	CF	HASLAM, "Protection of Carboxyl Groups", Protective Groups in Organic Chemistry, Chapter 5, McOmie, ed., Plenum Press, pg. 183-215 (1973)	
	CG	JONES, "Resistance Patterns Among Nosocomial Pathogens: Trends Over the Past Few Years", Chest, 119:397S-404S (2001)	
	CH	OSBORNE, et al., "A Novel and Stereocontrolled Synthesis of (5R)-(Z)-6-(1-Methyl-1,2,3-Triazol-4-Ylmethylene)Penem-3-Carboxylic Acid, A Potent Broad Spectrum β-Lactamase	

Examiner Signature		Date Considered	
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Substitute for form 1449/PTO				<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				Application Number	<del>11/283,288 Conf. #4075</del>
				Filing Date	<del>November 18, 2005</del>
				First Named Inventor	<del>Aranapakam M. Venkatesan</del>
				Art Unit	<del>N/A</del>
				Examiner Name	<del>Not Yet Assigned</del>
Sheet	2	of	2	Attorney Docket Number	<del>0036119.00200US3</del>

10/693315  
10/24/2003  
Takao Abe  
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36119.227US1  
AM10090SP1

		Inhibitor", Journal of The Chemical Society, Letchworth, Great Britain, 6:371-373 (1989)	
	CI	PAYNE, et al., "β-Lactamase Epidemiology and the Utility of Established and Novel β-Lactamase Inhibitors", Exp. Opin. Invest. Drugs, 9(2):247-261 (2000)	
	CJ	RIETSCHA, et al., "Collaborative Clinical Pharmacokinetics Service in a Community Hospital", Am. J. Hosp. Pharm., 41:463-477 (1984)	
	CK	SANDERS, "Cefepime: The Next Generation?", Clin. Infect. Dis., 17:369-379 (1993)	
	CL	SUTHERLAND, "β-Lactam/β-Lactamase Inhibitor Combinations: Development, Antibacterial Activity and Clinical Applications", Infection, 23(4):191-200 (1995)	

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